

WHAT IS CLAIMED IS:

5 1. A recording apparatus provided with a stepping motor as an actuator, comprising: storage means for storing and holding a final exciting phase of said motor at the time of software power off; and control means for starting excitation from said final exciting phase without performing phase alignment of said motor at the time of restarting from a software power off state.

10 2. A recording apparatus provided with a stepping motor as an actuator, comprising: storage means for storing and holding a final exciting phase of said motor at the time of software power off and a
15 termination status indicating the presence/absence of an abnormality at the time of software power off; and control means for, at the time of restarting from a software power off state, starting excitation from said final exciting phase without performing phase alignment
20 of said motor when the termination status is normal, and performing said phase alignment of the motor when the terminal status is abnormal.

25 3. The recording apparatus according to claim 2, wherein said control means starts the phase alignment of the motor from said final exciting phase when the termination status is abnormal.

4. A recording apparatus provided with a stepping motor as an actuator, comprising: storage means for storing and holding a final exciting phase of said motor at the time of software power off; a sensor for, when predetermined pulses are applied to said motor from a standby position, judging whether the motor moves by the predetermined pulses; and control means for starting excitation from said final exciting phase to apply the predetermined pulses without performing phase alignment of said motor at the time of restarting from a software power off state, normally starting when said sensor judges that the motor moves by said predetermined pulses, and performing the phase alignment of said motor when it is judged that the motor does not move by said predetermined pulses.

5. A recording apparatus provided with a stepping motor as an actuator, comprising: storage means for storing and holding a final exciting phase of said motor at the time of software power off; a sensor for detecting a rotating amount of said motor or an equivalent value which is detectable even in a software power off state; and control means for, at the time of restarting from the software power off state, obtaining an exciting phase compatible with a rotor position of said motor at the time of restarting from data of said rotating amount of the motor and said final exciting

phase detected by said sensor, and starting excitation from said obtained exciting phase without performing phase alignment of said motor.

5 6. The recording apparatus according to any one of claims 1 to 5, wherein said recording apparatus is a serial type recording apparatus.

10 7. The recording apparatus according to claim 6, wherein said stepping motor is a carriage driving motor.

15 8. The recording apparatus according to claim 6, wherein said stepping motor is a printing material conveying motor.

20 9. The recording apparatus according to claim 6, wherein said stepping motor is a printing material sheet supplying motor.

 10. The recording apparatus according to claim 6, wherein said stepping motor is a recording head maintenance mechanism driving motor.

25 11. The recording apparatus according to any one of claims ¹⁻⁵~~1 to 10~~, wherein said recording apparatus is an ink jet type recording apparatus.

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5 storage means for storing a final exciting phase
of said stepping motor at the time of power off of said
device; and

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another storage means for storing a termination status indicating a presence/absence of abnormality at

the time of power off of said device, wherein

at the time of restarting from the power off state
of said device, said control means starts the
excitation of the stepping motor from said final

5 exciting phase stored in said storage means without
performing the phase alignment by said phase alignment
means when said another storage means stores a normal
termination status, and performs the phase alignment by
said phase alignment means before starting drive of the
10 stepping motor when said another storage means stores
an abnormal termination status.

15 15. The recording apparatus according to claim
14, wherein said control means starts the phase
alignment by said phase alignment means from said final
exciting phase stored in said storage means when said
another storage means stores an abnormal termination
status.

20 16. A recording apparatus provided with a
stepping motor as an actuator, comprising:

drive means for changing an exciting phase of the
stepping motor to step-drive the stepping motor;

25 storage means for storing a final exciting phase
of said stepping motor at the time of power off of said
device;

phase alignment means for aligning a mechanical

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phase of said stepping motor and an electrical phase stored in said storage means;

a driven member driven by said stepping motor;

5 a sensor for judging whether said driven member moves by predetermined pulses from a standby position of the member; and

control means for starting excitation of the stepping motor from said final exciting phase stored in said storage means to drive said driven member by the
10 predetermined pulses at the time of restarting from a power off state of said device, normally starting the stepping motor without performing the phase alignment by said phase alignment means when said sensor judges that the driven member is moved by the predetermined
15 pulses, and performing the phase alignment by said phase alignment means when said sensor judges that the driven member is not moved by the predetermined pulses.

17. A recording apparatus provided with a
20 stepping motor as an actuator, comprising:

drive means for changing an exciting phase of the stepping motor to step-drive the stepping motor;

a sensor for detecting a value corresponding to a rotating amount of said stepping motor even at the time
25 of power off of said device;

storage means for storing a final exciting phase of said stepping motor at the time of power off of said

device, a value stored in the storage means being
rewritten in accordance with the value of said sensor
at the time of power off; and

5 control means for, at the time of restarting from
a power off state of said device, starting excitation
of the stepping motor from the exciting phase rewritten
and stored in said storage means also at the time of
power off of said device.

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